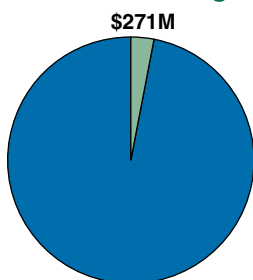


Goal 4 FY 2000 Obligations



Note: EPA FY 2000 Obligations were \$8,974 million

GOAL 4: PREVENTING POLLUTION AND REDUCING RISK IN COMMUNITIES, HOMES, WORKPLACES AND ECOSYSTEMS

Pollution prevention and risk management strategies aimed at cost-effectively eliminating, reducing, or minimizing emissions and contamination will result in cleaner and safer environments in which all Americans can reside, work, and enjoy life. EPA will safeguard ecosystems and promote the health of natural communities that are integral to the quality of life in this nation.

OVERVIEW

A preventive, multimedia approach, focusing on potential risks to human health and the environment from exposure to pesticides in homes, schools, communities, workplaces, and the ecosystem, is central to EPA's strategy for protecting the public and the environment from the complex array of pollutants and threats imposed by industrial society. Preventing pollution before it causes harm can be cheaper and smarter than cleaning it up afterward. Cooperative and voluntary activities, including releasing data on the risks posed by pesticides and industrial chemicals; encouraging the use of safer alternative technologies,

chemicals, and farm practices; and promoting industrial processes that use less hazardous materials or recycle, are a vital part of EPA's pollution prevention strategy. In conducting these activities, EPA emphasizes protecting children who can be more susceptible than adults to injury from exposure to hazardous compounds. EPA's pollution prevention efforts involve many Agency programs, including those for pesticides, chemical management, indoor air pollution, waste management, and research. In addition many pollution prevention activities require sharing responsibilities with other federal, state, and tribal agencies, private industry, and nonprofit organizations. EPA's efforts with these partners have led to reduced risk in communities, homes, workplaces, and ecosystems.

WEST NILE VIRUS

In FY 2000 EPA addressed the potential threat to the public from mosquito-borne viruses such as the West Nile virus, which can cause encephalitis. In 1999 there were more than 60 reported cases of West Nile encephalitis and some deaths. EPA engaged in a broad, preemptive communication strategy to provide information on the risks and benefits of pesticide applications for mosquito control before and during major outbreaks. Communication products were targeted to the public, states, localities, pesticide registrants, formulators, handlers, applicators, the U.S. Department of Health and Human Services, the U.S. Department of Agriculture, environmental groups, and other interested parties. EPA also ensured that states and localities applied pesticides according to proper application methods to protect the public from pesticide exposure.



FY 2000 PERFORMANCE

Reducing Risk from Pesticides and Other Chemicals

EPA made substantial progress during FY 2000 in reducing the risks posed by pesticides and other chemicals by promoting improved pesticide management practices, implementing the lead hazard reduction program, and gaining commitments from industry to participate in the High Production Volume Challenge Program.

Pesticides

EPA worked with various pesticide user groups and other stakeholders to ensure that safer pest management practices are used in agriculture, homes, and public buildings (including schools). For example EPA continued to partner with farmers, researchers, and agribusiness to encourage the use of innovative and economical methods for reducing pesticide risks.

EXAMPLES OF INNOVATION IN REDUCING PESTICIDE RISK

(These projects are described at <http://www.epa.gov/oppbppd1/PESP/>.)

The Pineapple Growers Association of Hawaii is using a new innovative injection sprayer that releases herbicides only where they are needed. The Association is also testing a “living mulch” grass cover crop that is stunted in height and out-competes other weeds.

The Glades Crop Care, Inc. in Florida has found that their pepper growers can spend 63 percent less money on pest management by making fewer applications of pesticides, applying chemicals that are much less environmentally disruptive and by using a more biointensive pest management program. In addition, these same growers ended up using 43 percent less pesticides on their pepper crop.

The New York City Board of Education reduced pesticides in their schools by 33 percent in the 2000 school year. This school year (September 2000), they are only using boric acid and baits. The Department avoids any and all use of pesticide products in classrooms and other areas where students might be exposed to potentially harmful levels of pesticides.

The Mint Industry Research Council promotes the use of predatory mites to control spider mites and the use of clean rootstock that will prevent the introduction of diseased material into new fields at the time they are being established.

In addition, EPA collaborated with Canada's Pest Management Regulatory Agency to develop an exam of core principles for pesticide applicators to be incorporated into existing pesticide applicator certification and training programs in both countries. EPA is also working with the states and tribes to establish a framework for better managing pesticides that are likely to leach into groundwater.

Lead

By the end of FY 2000 EPA had authorized a total of 38 programs (34 states, two tribes, the District of Columbia, and Puerto Rico) to train and certify lead-based paint abatement professionals to help ensure that those engaged in abatement projects work to minimize lead exposure. EPA began operating such programs in

the remaining states and three territories. EPA implemented the Pre-renovation Notification Rule, which requires people who perform renovation for compensation to distribute a lead hazard information pamphlet before starting the work. The Agency also promulgated the Lead Hazard Rule, which establishes uniform, national standards for lead in paint, dust, and soil in pre-1978 housing and child-care facilities.

The High Production Volume (HPV) Challenge Program

High production volume chemicals are those that are manufactured or imported into the U. S. in amounts of one million pounds or more. The HPV Challenge Program is addressing deficiencies in the public availability of basic health and environmental hazard data for 2,800 HPV chemicals so that scientists, policy makers, industry, and the public can make sound judgments about the potential risks from these chemicals to people and the environment. The program made progress in FY 2000 by significantly increasing the number of companies and sponsored chemicals in the program from last year's level. Four hundred and sixty-nine companies have committed publicly to making screening-level hazard data on 2,155 chemicals available by 2005. EPA has already received some data, which are provided on the Chemical Right to Know web site (www.epa.gov/chemrtk).

Green Chemistry

In FY 2000 EPA advanced pollution prevention and industrial ecology through the Green Chemistry Challenge Awards Program, which recognizes and supports innovative chemical processes that accomplish pollution prevention through source reduction. In FY 2000 EPA received 50 percent more nominations for the awards than its target of 50 applications/nominations. Six awards were made in five categories, including those for designing safer chemicals, academic contributions, and small businesses. As an example, one award was made to Dow AgroSciences for the development of the Sentricon™ Termite Colony Elimination System. Each year as many as 1.5 million homeowners in the United States experience a termite problem and seek a control option. Sentricon™ represents a novel technology enabling an Integrated Pest Management approach by using monitoring and targeted delivery of a highly specific bait. It delivers high technical performance, environmental compatibility, and reduced human risk through the use of very small quantities of the control agent. For

specific information on other awards made in FY 2000, see the Green Chemistry Home Page (www.epa.gov/greenchemistry).

Asbestos

A 1999 consumer scare over asbestos-contaminated vermiculite prompted EPA to undertake an analysis of the level of asbestos in vermiculite. Vermiculite is a product whose absorbent properties make it useful in lawn and garden, agricultural, and horticultural products. EPA's analysis found that consumers face only a minimal health risk from using vermiculite products at home or in their gardens. However, because the analysis showed that occupational vermiculite exposure might be higher, EPA provided the analysis to the Occupational Safety and Health Administration (OSHA) for further study. In FY 2000 EPA also proposed extending the Asbestos Worker Protection Rule issued under the authority of the Toxic Substances Control Act. The extension is intended to extend protection from the risks associated with asbestos exposure to state and local government workers in 27 states not otherwise covered by OSHA asbestos standards, or by OSHA-approved state Worker Protection plans, as well as employees in the automotive brake and clutch repair industry.

Endocrine Disruptors

EPA did not begin testing chemicals in commerce for endocrine disruption in FY 2000, as was projected in 1999. The Agency found that assay systems and high-throughput pre-screening (HTPS) technology, which is an automated test system capable of detecting estrogen and androgen receptor interactions on thousands of chemicals, were not yet sufficiently developed for routine regulatory application for existing and new chemicals. EPA is now focusing on developing quantitative structure-activity relationship models to serve the purpose HTPS would have served and continues to monitor the progress of HTPS efforts for endocrine disruption elsewhere in the world. EPA was successful in initiating work on four screens, exceeding its goal of two, while continuing work on two screens it had initiated the previous year. The Agency anticipates completing work on all eight Tier 1 screens (Tier 1 screens detect chemical substances capable of interacting with the estrogen, androgen, and thyroid hormonal systems) by the end of 2003 and the additional five Tier 2 tests (Tier 2 tests confirm and characterize the interaction) by the end of 2005.

Achieving Healthier Indoor Environments

In FY 2000 EPA took action to raise public awareness about the role of triggers of asthma in increasing the severity and frequency of asthma episodes in indoor settings. The action was part of the Childhood Asthma Initiative and focused particularly on low-income children. The Ad Council, which provides advertising campaigns for the public good, selected EPA for a multi-year partnership through which the Council is providing *pro bono* creative services to help the Agency develop a series of public messages about the relationship between indoor pollutants and asthma. EPA organized three Regional Asthma Summits for Managed Care to engage the managed care industry in efforts to include information about indoor asthma trigger control in their conventional medical management plans for asthma patients. The first National Asthma In-Home Education and Management grants competition produced two winning pilot projects, which received roughly \$100,000 each, to demonstrate the results of educating families with asthma sufferers about indoor asthma triggers in their homes.

A new public service announcement encouraging parents who normally smoke inside their homes to “go outside for your kids” won the prestigious Silver Screen Award for television advertising and leveraged more than \$14 million worth of donated air time. The announcement was co-sponsored by EPA with the

PILOT FOR “BUY CLEAN”

EPA and the Western Massachusetts Coalition for Occupational Safety and Health are testing a pilot program called “Buy Clean” with the Chicopee School District. “Buy Clean” schools will evaluate products as varied as art, auto shop, and drafting classroom supplies, landscaping and renovation products, cleaners, chemicals used in chemistry laboratories, and other custodial and maintenance supplies, and purchase environmentally preferable products and services (where appropriate) to promote healthier indoor air in schools. Schools will consider health, environmental, and product effectiveness characteristics in making decisions on which products to purchase. The project is part of a pilot grant program to test “Buy Clean” in schools around the country. In addition, EPA is investigating incentives to encourage vendors to sell products that are more environmentally preferable at competitive prices.

Consumer Federation of America Foundation and the American Medical Association. The radio version played on 625 radio stations, and the print campaign ran in 281 newspapers across the nation. Environmental tobacco smoke (ETS) exposure increases the risk of lower respiratory tract infections such as bronchitis and pneumonia. EPA estimates that between 150,000 and 300,000 of these cases annually in infants and children up to 18 months of age are attributable to exposure to ETS (EPA 1992). ETS exposure is causally associated with increased risk of acute and chronic middle ear disease (World Health Organization 1999). The Agency estimates that 395,000 more children aged six and under are now living in homes where smoking is not permitted than in FY 1999 as a result of such education and outreach efforts.

EPA met its goal in FY 2000 to educate the public about the health risks of indoor radon exposure by collaborating with states through the federal radon grants program and working in partnership with nongovernmental organizations such as the National Environmental Health Association and the Consumer Federation of America Foundation. Indoor radon exposure causes an estimated 15,000 to 22,000 lung cancer deaths each year. Based on sales of radon mitigation fans, EPA estimates that as a result of various outreach activities some 52,000 residential radon mitigations took place in FY 2000, meaning that approximately 138,800 more people lived in homes where radon exposure has been reduced than last year. Moreover, based on information collected by the National Association of Home Builders, some 200,000 new homes were built in FY 2000 using radon-resistant construction techniques, preventing residential exposure to radon for 534,000 more people.

Contributing to EPA's effort to create healthier indoor environments for children in schools, an additional 5,000 schools in FY 2000 (representing about 2,600,000 students and staff) adopted the problem-solving and pollution prevention approaches to school indoor environments in the Agency's Indoor Air Quality Tools for Schools kit.

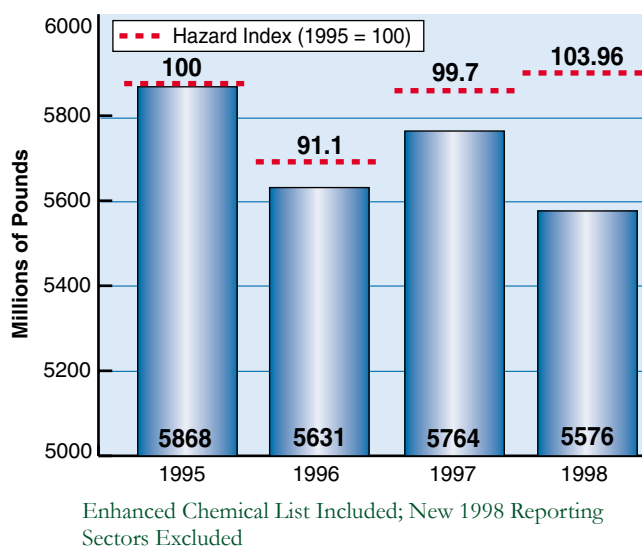
Preventing Pollution, Reducing Waste, and Recycling

Toxics Release Inventory (TRI)

One important measure of the nation's progress in fostering pollution prevention is the trend in the

generation of non-recycled wastes covered by TRI. Waste generation measures are best suited for assessing source reduction efforts, as they are unaffected by the application of pollution control systems (e.g., waste treatment systems, incinerators, etc.) which reduce environmental releases but do not reduce or prevent generation of pollutants at their source. The generation of non-recycled wastes by those manufacturing industries that have been monitored over the last 8 years under TRI declined by 15.1 million pounds from 1997 to 1998, a 0.2 percent decline. When the change between 1997 and 1998 is normalized for increases in production by these industrial categories, the decrease represents a 4.1 percent reduction, which is more than double the FY 2000 performance target of a two percent annual production-normalized decline in the generation of non-recycled TRI wastes.

Releases and Transfers of TRI Chemicals (1995-1998) and Associated Hazard Indices



Other important measures of pollution prevention are the trends for the volume and toxicity of direct environmental releases and off-site transfers of chemicals covered by TRI. Release/transfer measures, unlike waste generation measures, are considered “end-of-pipe” measures that capture pollution levels after on-site pollution control or recycling/recovery technologies have been applied to generated wastes. The releases and off-site transfers from those manufacturing industries and chemicals that have been monitored since the TRI chemical reporting list was expanded in 1995 declined by 187.3 million pounds (3.2%) from 1997 to 1998. However, the toxicity of these wastes has increased from 1995 to 1998. [The hazard index is

determined by multiplying the release/transfer pounds for a chemical by the higher of the two toxicity weights (ingestion or inhalation) assigned to the chemical in EPA's Risk Screening Environmental Indicators model, and then indexing the resulting values; the index for the value from the year 1995 is 100.] Further discussion of the TRI Program is presented under Goal 7.

EPA's New Chemicals screening system (Pre-Manufacture Notice (PMN) requirements) and the Chemical Right to Know (CrtK) initiative may help to reverse the trend of increasing waste toxicity. The PMN process prevents manufacture of new chemicals determined to pose unreasonable human health or environmental risks. The Agency expects the CrtK Initiative, begun in FY 2000, to encourage industry to replace dangerous chemicals already in use by making hazard information publicly available by 2005 for nearly 2,155 HPV chemicals.

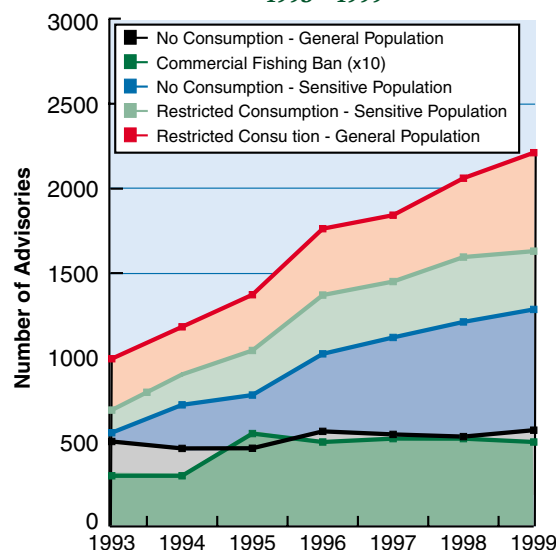
Design for the Environment Program (DfE)

DfE continues to work with private sector partners to advance cleaner technologies. In 2000 EPA's effort helped achieve a cumulative 36 percent increase in the use of alternative cleaning technologies by the garment care industry over 1998 levels. Under the program, 14 safer cleaning products have been developed and marketed, including redesigned products that do not contain alkyl phenol ethoxylates (suspected endocrine disruptors). The foam furniture industry is investigating alternatives to the use of methylene chloride, a hazardous air pollutant for which OSHA has restricted use in foam adhesive applications. The dry cleaning industry has significantly reduced its use of perchloroethylene, which EPA has characterized as a probable human carcinogen.

Persistent Bioaccumulative and Toxic (PBT) Initiative

The PBT Initiative seeks to reduce the use of priority PBT pollutants and their presence in the environment. In FY 2000 EPA released four National Action Plans for public comment. These plans address ongoing and planned reduction activities for Hexachlorobenzene; alkyl-lead; Octachlorostyrene; and a group of five canceled pesticides (Aldrin/Dieldrin, Chlordane, dichlorodiphenyltrichloroethane (DDT), Mirex, and Toxaphene). Additional efforts included finalizing the Mercury Action Plan, expanding the collection of monitoring data on PBTs in fish and in humans, funding 12 new state and regional reduction projects, evaluating more than 200 additional substances

Fish and Wildlife Advisories by Type, 1993 - 1999



for PBT hazard levels, and launching the development of two coordinated Agency strategies for PBT monitoring and risk communication.

States, territories, and tribes issue consumption advisories to protect people living within their boundaries from potential health risks associated with the consumption of fish and wildlife from contaminated waterbodies. The advisories suggest that consumption of fish and wildlife from specific water bodies or water body types be restricted or avoided. PBT chemicals—mercury, polychlorinated biphenyls (PCBs), chlordane, dioxins, and DDT—were at least partially involved in 99 percent of all advisories. Fish and wildlife from contaminated waterbodies can affect low-income people who fish and hunt their own food, Native American Tribes who have historically been high-volume consumers of fish and wildlife, and individuals who make the lifestyle choice to eat fish and wildlife in larger quantities than the consumer average.

The increase in fish consumption advisories from 1993 to 1999 generally reflects more monitoring and better assessment methods, and is not necessarily a result of worsening environmental conditions. For sensitive populations, “No consumption” advisories increased 132 percent and restricted consumption advisories increased 137 percent between 1993 and 1999. Over the long term, advisories for sensitive populations have increased more rapidly than advisories for the general population, which have remained relatively stable. EPA and its partners are addressing the presence of PBTs in the environment through programs under many Goals in the Agency Strategic

Plan; however, the advisory data indicate that much work needs to be done to ensure that those individuals who consume fish and wildlife in large quantities are protected from toxics in their food. Additional information pertaining to the advisories is found in Goal 2.

Recycling of Municipal Solid Waste

Recycling of municipal solid waste (MSW) has continued to increase, and the diversion of more MSW from landfilling and combustion to recycling is higher than ever before. In 1998, the most recent year for which data are available, 28.2 percent of MSW was recycled, an increase of 0.8 percent from 1997. This figure means that more than 62 million tons of recyclables were diverted from disposal in 1998 alone. The increase bodes well for attainment of EPA's FY 2000 target (reflecting 1999 recycling) of 29 percent (64 million tons). Compared to the previous year, MSW generation increased in 1998 by 4 million tons, reaching a level of 220 million tons. Per capita generation remained stable at 4.4 pounds per day, slightly higher than the Agency's goal of 4.3 pounds per day.

Preventing Pollution on Tribal Lands

An accurate assessment of current environmental conditions is critical to addressing environmental issues in Indian Country. In FY 2000 EPA collected basic environmental data for six percent of Indian Country, for a cumulative total of 16 percent. In a complementary effort, EPA regional offices are working with tribes to help implement environmental programs in Indian Country. In FY 2000, 16 tribes assumed EPA program responsibilities, exceeding the Agency's goal of 12 tribes. The total number of EPA programs operated by tribes is now 270. Also, by the end of FY 2000, 49 tribes had signed Tribal Environmental Agreements, which identify tribe-specific environmental priorities to address multimedia environmental concerns in Indian Country.

SUMMARY OF FY 2000 PERFORMANCE

EPA and its partners made substantial progress toward achieving Goal 4 and its objectives. By the end of FY 2000 EPA had authorized 38 states, tribes, or territories to train and certify lead-based paint abatement professionals to help ensure that those engaged in abatement projects work to minimize lead

exposure. Of particular importance were the 469 companies that have committed to make screening-level hazard data available publicly on 2,155 HPV chemicals by 2005. Also in FY 2000, EPA's efforts helped to achieve a cumulative 36 percent increase in the use of alternative cleaning technologies by the garment care industry over 1998 levels. Finally EPA released four National Action Plans that address ongoing and planned reduction activities for five canceled pesticides as part of the initiative to reduce the use and presence of priority PBT pollutants in the environment.

STRENGTHENING PROGRAM INTEGRITY THROUGH IMPROVED MANAGEMENT

In response to a continuing concern that the Agency needs to strengthen oversight provided for tribal grants (in particular, grants made with General Assistance Program funds), EPA assigned additional staff, developed improved guidance, and provided additional training to its grants management staff in FY 2000. Limitations that prevent the use of General Assistance funds for implementing environmental programs have been a barrier to tribes' assumption of programs and willingness to enter into substantive agreements.

RESEARCH CONTRIBUTIONS

Research supports Goal 4 in the development or improvement of test guidelines for human health and ecological endpoints of regulatory concern under the Federal Insecticide, Fungicide, and Rodenticide Act and the Toxic Substances Control Act. In FY 2000 EPA developed a model to assess the susceptibility of infants' and children's developing immune systems to environmental contaminants. It will be an important tool for evaluating the impact of environmental stressors on human health and ecological endpoints. Understanding how environmental contaminants affect developing immune systems is particularly important because infants and children appear to be at greater risk than adults of experiencing adverse reactions when exposed to toxic substances.

PROGRAM EVALUATION

The General Accounting Office (GAO) recently assessed the impact and effectiveness of several EPA activities dealing with children's health. In its November

1999 report, *Pesticides: Use, Effects and Alternatives to Pesticides in Schools* (RCED-00-17, <http://www.gao.gov>), GAO noted that although there is no comprehensive, nationwide information on the amount of pesticides used in schools, the Agency is considering conducting a survey on the use of pesticides in schools. GAO also determined that information is limited regarding short- and long-term illnesses related to pesticide exposure in all settings; however, EPA and the National Institutes of Health have initiated several studies to identify illnesses linked to pesticide exposure. To address potential exposure of children to pesticides, the Agency and the states have initiatives to encourage reduced use of pesticides in schools through Integrated Pest Management and the Pesticide Environmental Stewardship Program, as well as the use of reduced-risk pesticides.

GAO also assessed the implementation of the Worker Protection Standards and how well the Worker Protection Program protects children who might be exposed to pesticides in agricultural settings. GAO made several recommendations regarding worker protection in its report *Pesticides: Improvements Needed to Ensure the Safety of Farmworkers and Their Children* (RCED-00-40). EPA generally agrees that the recommendations are sound and intends to consider them during the assessment of the Worker Protection Program in FY 2001.

In FY 2000 EPA began the National Assessment of the Worker Protection Standard for pesticides. The assessment, a multi-phase process that will take place over the next 18 to 24 months, will help the Agency determine whether the Worker Protection Standard program is adequately meeting its intended goals of addressing the risks to agricultural workers. The initial public participation meeting was held in June 2000 in Austin, Texas. As a result of that meeting, a number of assessment themes or topic areas were identified for further consideration, including training, enforcement, complaint and retaliation, children's health, and communication.

EPA continued its evaluation of the certification and training program for pesticide applicators, which started in 1997 with the formation of the joint EPA-U.S. Department of Agriculture Certification and Training Assessment Group (CTAG). In FY 2000 states indicated the need for using a professional exam development process to improve their ability to

determine the competency of pesticide applicators. CTAG's work is leading to improvement in pesticide applicator exams, establishment of a pesticide safety education center for training educators and regulators, and development of a national core pesticide applicator certification exam for use by state regulators. Improving the certification and training program addresses risk at the source (pesticide applications).

ASSESSMENT OF IMPACTS OF FY 2000 PERFORMANCE ON FY 2001 ANNUAL PERFORMANCE PLAN

EPA has reflected FY 2000 performance and advances in program measurement in its FY 2001 annual performance goals (APGs) and targets. The performance measure for environmental stewardship strategies (ESP) in the prevention of harmful pesticide exposure has been significantly increased for FY 2001, based on greater than expected performance in FY 2000. The program had revised the format and requirements for completing ESP strategies, which streamlined and accelerated the submissions and review processes. The FY 2001 APG for safer alternative cleaning technologies has been reworded to include a new measure, perchloroethylene reduction, which is a more reliable indicator of progress toward the APG than the percentage increase in the use of alternative cleaning technologies, the FY 2000 measure. In addition EPA is discontinuing its performance measure for tribal environmental agreements (TEAs) while it redefines the TEA process.

TABLE OF RESULTS

The following table of results includes performance results for the nine FY 2000 APGs that appear in Goal 4. In cases where the FY 2000 APG is associated with an FY 1999 APG, the table includes the FY 1999 APG below the FY 2000 APG for ease in comparing performance.

FY 2000 Annual Report
Annual Performance Goals and Measures - Table of Results

Summary FY 2000 Performance		GOAL 4 - PREVENTING POLLUTION AND REDUCING RISK IN COMMUNITIES, HOMES, WORKPLACES, AND ECOSYSTEMS			
4	Goals Met	2	Goals Not Met	3	Other
FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999	
		Planned	Actual	Actual	
BY 2005, PUBLIC AND ECOSYSTEM RISK FROM PESTICIDES WILL BE REDUCED THROUGH MIGRATION TO LOWER RISK PESTICIDES AND PEST MANAGEMENT PRACTICES, IMPROVING EDUCATION OF THE PUBLIC AND AT-RISK WORKERS, AND FORMING “PESTICIDE ENVIRONMENTAL STEWARDSHIP” PARTNERSHIPS WITH PESTICIDE USER GROUPS.					
FY 2000 APG 21: Protect homes, communities, and workplaces from harmful exposure to pesticides and related pollutants through improved cultural practices and enhanced public education, resulting in a reduction (to be determined) in the incidence of pesticide poisonings reported nationwide.					
(FY 1999) Protect homes, communities, and workplaces from harmful exposure to pesticides and related pollutants through improved cultural practices and enhanced public education, resulting in a reduction of 15% cumulative (1994 reporting base) in the incidence of pesticide poisonings reported nationwide.					
Performance Measures					
- Environmental Stewardship Strategies.		71	109	69	
- Manage pesticides with high probability to leach/persist in groundwater.		10%	0%	0%	
- Labor population will be adequately trained (cumulative)*.		50%	50%	48%	
Explanation: Goal not met. Data now available do not allow a reliable estimate of the magnitude or trend in the national incidence of pesticide poisonings. Through the Chemical and Pesticide Results Measures project, which involves EPA, state, and industry stakeholders, EPA is developing an accurate reporting measure for pesticide poisonings, among other environmental indicators. EPA expects to develop this measure in FY 2002. The Pesticide and Groundwater State Management Plan Rule was delayed in regulatory review, which prevented the Agency from meeting its goal. It is unclear at this time when the rule will move forward, if at all. In spite of the delay in finalizing the rule, the Agency is on track to meet its long-term goal, which is to manage the risk of pesticides in groundwater. The Agency has refocused this performance measure in FY 2001 on significant pesticide management actions taken by EPA on the specific pesticides that are likely to leach and persist in groundwater. *[Note: The FY 2001 President’s Budget incorrectly characterized the target for the performance measure “labor population will be adequately trained” as a cumulative percentage instead of an annual percentage. Therefore the FY 2000 achievement is 50% of the labor population trained.]					
Data Source: Aggregation of training statistics from state cooperative extension services and Worker Protection Program. State Cooperative Extension Services represent the education and training arm of State Agriculture Departments that extend training programs to counties.					
Data Quality: Training statistics are dependent on accurate record keeping at state or county level.					

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
		Planned	Actual	Actual
BY 2005, THE NUMBER OF YOUNG CHILDREN WITH HIGH LEVELS OF LEAD IN THEIR BLOOD WILL BE SIGNIFICANTLY REDUCED FROM THE EARLY 1990'S.				
<p>FY 2000 APG 22: Administer federal programs and oversee state implementation of programs for lead-based paint abatement certification and training in 50 states, to reduce exposure to lead-based paint and ensure significant decreases in children's blood levels by 2005.</p> <p>(FY 1999) Complete the building of a lead-based paint abatement certification and training in 50 states, to ensure significant decreases in children's blood lead levels by 2005 through reduced exposure to lead-based paint.</p> <p>Explanation: Through FY 2000 EPA continued building the lead-based abatement training and certification program. Programs for the training, accreditation and certification of lead-based paint abatement professionals were established in 38 programs (34 states, two tribes, the District of Columbia, and Puerto Rico). For 19 states that have chosen not to seek approval of a state program, a federal training, accreditation and certification program was established. Additional legal requirements for the tribes have delayed development of two of the four programs planned for FY 2000. EPA activities to reduce exposure to lead-based paint are on track to ensure significant decreases in children's blood levels by 2005.</p> <p>Data Source: Data on blood lead levels in children are from the National Health and Nutrition Examination Surveys conducted by the Centers for Disease Control and Prevention. Annual surveys started in 1999.</p> <p>Data Quality: Data quality issues are related to survey sampling bias and changes in survey questions from survey to survey.</p>	Target year is FY 2005			Target year is FY 2005
BY 2005, OF THE APPROXIMATELY 2,000 CHEMICALS AND 40 GENETICALLY ENGINEERED MICROORGANISMS EXPECTED TO ENTER COMMERCE EACH YEAR, WE WILL SIGNIFICANTLY INCREASE THE INTRODUCTION BY INDUSTRY OF SAFER OR "GREENER" CHEMICALS WHICH WILL DECREASE THE NEED FOR REGULATORY MANAGEMENT BY EPA.				
<p>FY 2000 APG 23: Ensure that of the up to 1,800 new chemicals and microorganisms submitted by industry each year, those that are introduced in commerce are safe to humans and the environment for their intended uses.</p> <p>(FY 1999) Ensure that of the approximately 1,800 new chemicals and micro-organisms submitted by industry each year, those that are introduced in commerce are safe to humans and the environment for their intended uses.</p> <p>Explanation: Goal met.</p> <p>Data Source: The New Chemicals Management Information Tracking System tracks requests submitted by industries for review of new chemicals. The requests include information on chemicals to be manufactured and imported, chemical identity, manufacturing process, use, worker exposure, environmental releases, and disposal.</p> <p>Data Quality: EPA reviews industry data and performs risk screening and assessments.</p>	1,800	1,838		1,717
<p>FY 2000 APG 24: Provide methods and models to evaluate the impact of environmental stressors on human health and ecological endpoints for use in guidelines, assessments, and strategies.</p> <p>Performance Measure</p> <ul style="list-style-type: none"> - Develop an animal model to assess susceptibility of the developing immune system to environmental contaminants. <p>Explanation: Goal met. A model to assess the susceptibility of the developing immune system to environmental contaminants was produced. The model is an important tool for evaluating the impact of environmental stressors on human health and ecological endpoints.</p>	1	1		No FY 1999 APG

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
		Planned	Actual	Actual
Data Source:	Agency generated material.			
Data Quality:	As required by the Agency-wide formal peer review policy issued in 1993, and reaffirmed in 1994 and 1998, all major scientific and technical work products used in Agency decision making are independently peer reviewed before their use. EPA has implemented a rigorous process of peer review for both its in-house and extramural research programs. Peer review panels include scientists and engineers from academia, industry, and other federal agencies.			
BY 2005, 15 MILLION MORE AMERICANS WILL LIVE OR WORK IN HOMES, SCHOOLS, OR OFFICE BUILDINGS WITH HEALTHIER INDOOR AIR THAN IN 1994.				
FY 2000 APG 25:	890,000 additional people will be living in healthier residential indoor environments.	890,000	1,032,000	
(FY 1999)	700,000 additional people will live in healthier residential indoor environments.			1,322,000
Explanation:	<p>FY 2000: Goal met. In FY 2000 there were 1,032,000 additional people living in healthier residential indoor environments. The target was exceeded because EPA's outreach efforts with builders to construct radon-resistant homes and outreach to the general public to mitigate radon were more effective than originally anticipated.</p> <p>FY 1999: Goal met. Based on information received in FY 2000, EPA exceeded its FY 1999 targets. In FY 1999 the results were higher (than the planned target of 700,000) because outreach efforts were also more effective than anticipated.</p>			
Data Source:	The National Association of Home Builders and the radon industry provide data on number of radon resistant homes built. The number of homes mitigated for high radon levels is obtained through voluntary industry reporting. The Centers for Disease Control provide data on the number of children under 6 years old not exposed to environmental tobacco smoke in the home.			
Data Quality:	Each of the data sources described above provides a reasonable estimate of public action on EPA activities.			
FY 2000 APG 26:	2,580,000 students, faculty and staff will experience improved indoor air quality in their schools.	2,580,000	2,600,000	No FY 1999 APG
Explanation:	Goal met. An additional 5,000 schools (representing about 2.6 million students, faculty and staff) adopted the Agency's Air Quality Tools for Schools kit.			
Data Source:	EPA's Indoor Air Quality Tools for Schools Program is using a database to track the number of schools that receive the Tools for Schools kit and the number of schools implementing good indoor air quality practices consistent with EPA guidance.			
Data Quality:	Data on actions taken are voluntarily self-reported by school personnel which may limit accuracy. Interpretation of EPA's guidance may also vary among schools, which affects what the schools report.			
BY 2005, REDUCE BY 25% (FROM 1992 LEVEL) THE QUANTITY OF TOXIC POLLUTANTS RELEASED, DISPOSED OF, TREATED, OR COMBUSTED FOR ENERGY RECOVERY. HALF OF THIS REDUCTION WILL BE ACHIEVED THROUGH POLLUTION PREVENTION PRACTICES.				
FY 2000 APG 27:	The quantity of Toxic Release Inventory (TRI) pollutants released, disposed of, treated or combusted for energy recovery, (normalized for changes in industrial production) will be reduced by 200 millions pounds, or 2%, from 1999 reporting levels.	200 M lbs	Data available in FY 2002	

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
		Planned	Actual	Actual
(FY 1999)	<i>The quantity of Toxic Release Inventory pollutants released, treated, or combusted for energy recovery will be reduced by 200 million pounds, or 2% from 1998 reporting levels.</i>			Data available in FY 2001
Explanation:	FY 2000 data will not be available until 2002 due to time lags associated with reporting and analysis. The most recent data available show the generation of non-recycled wastes by those manufacturing industries that have been monitored over the last 8 years under TRI declined by 15.1 million pounds from 1997 to 1998, a 0.2% decline. When the change between 1997 and 1998 is normalized for increases in production by these industrial categories, the decrease represents a 4.1% reduction. Greater use of pollution prevention tools and techniques have lead to the continued trend of reduction in waste generation.			
Data Source:	Facilities reporting under TRI. For example, in FY 1997, 21,490 facilities filed 71,670 TRI reports. EPA is developing regulations for improving reporting of source reduction activities by TRI reporting facilities.			
Data Quality:	A recent General Accounting Office (GAO) report reviewed EPA's progress to implement source reduction reporting requirements, results of voluntary program to reduce emissions of 17 highly toxic chemicals, and activities to disseminate source reduction information to meet state and industry needs. Facilities reporting under TRI are identified by regulation and are a narrower category of facilities. TRI release data covers only a fraction of the total release. [Toxic Substances: EPA Needs More Reliable Source Reduction Data and Progress Measures (09/23/94, GAO/RCED-94-93)].			
BY 2005, EPA AND ITS PARTNERS WILL INCREASE RECYCLING AND DECREASE THE QUANTITY AND TOXICITY OF WASTE GENERATED.				
FY 2000 APG 28:	Divert an additional 1% (for a cumulative total of 29% or 64 million tons) of municipal solid waste from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.	64 (29%) 4.3 lb	Data available in FY 2002	
(FY 1999)	<i>Maintain levels (for a cumulative total of 28% or 62 million tons) of municipal solid waste diverted from land filling and combustion, and maintain per capita generation of RCRA municipal solid waste at 4.3 pounds per day.</i>			Data available in FY 2001
Explanation:	Analysis of FY 1999 data is anticipated by September 2001.			
Data Source:	The baseline numbers for municipal solid waste (MSW) source reduction and recycling found in an EPA report titled "Characterization of Municipal Solid Waste in the United States" are developed using a materials flow methodology employing data largely from the Department of Commerce.			
Data Quality:	The report, including the baseline numbers and current progress, is widely accepted among experts. Data limitations stem from the fact that the baseline and annual progress numbers are based on a series of models, assumptions, and extrapolations, and as such, are not an empirical accounting of MSW generated or recycled.			
BY 2003, 60% OF INDIAN COUNTRY WILL BE ASSESSED FOR ITS ENVIRONMENTAL CONDITION, AND TRIBES AND EPA WILL BE IMPLEMENTING PLANS TO ADDRESS PRIORITY ISSUES.				
FY 2000 APG 29:	16% of tribal environmental baseline information will be collected and 12 additional tribes (cumulative total of 57) will have tribal/EPA environmental agreements or identified environmental priorities.	16% 12	16% 4	
(FY 1999)	<i>10% of tribal environmental baseline information will be collected and ten additional tribes (cumulative total of 45) will have tribal/EPA environmental agreements or identified environmental priorities.</i>			10% 11

FY 2000 ANNUAL PERFORMANCE GOALS AND MEASURES		FY 2000		FY 1999
		Planned	Actual	Actual
Explanation:	Goal not met. The Agency met its goal of collecting a 6% of tribal baseline information by enabling a pilot demonstration model to access and display tribal information from 11 EPA databases and seven internal data collection surveys containing environmental information. However, only four of the projected 12 EPA/Tibal Environmental Agreements (TEAs) were signed. During FY 2000 the Agency clarified its definition of TEAs to provide consistency across the program. Only four TEAs met the clarified definition to count as FY 2000 achievements. While the target for TEAs was not met in FY 2000, the work done to clarify the elements of a TEA and to assure consistency across the nation will lead to more accurate and consistent reporting in 2001 and beyond.			
Data Source:	Data are collected from EPA National Data bases in Envirofacts and regional records on grant programs. Tribal office records on tribal and federally funded data collection and other assessment activities are also important sources. As needed, data are also sought from state records.			
Data Quality:	EPA reviews and analyzes the data limitations and gaps. For example it is expected that some parts of the environment are more thoroughly studied than others and some areas have more complete data than others. EPA in cooperation with the tribes determines the appropriate follow-up activities to address data inadequacies and gaps through contracting resources, grant work plans, and environmental program negotiations.			